RPM 2011-12 End-of-Year Report

(and Summer Institute 2012 Preparation)

**Due Date: July 11, 2012**

This year’s end-of-year RPM report is essentially an “end-of-grant” reflection report as well; it will provide important documentation for our summative report for the overall project and will also serve a secondary role as a useful preparation process for the Summer Institute. While clearly one person will need to take the lead on assembling and synthesizing what goes into the final submission, we hope that rather than something written entirely by a single person in isolation, the report will reflect contributions from the core college team involved in the RPM work, and if possible include perspectives even from faculty who may have only been marginally involved (and who may have questions or concerns about the work) in order to surface critical themes/ideas in the areas below.

**Section 1: Reflections on the Project Overall**

For each of the subsections A to D below, address both the major successes you’ve had in the work to date as well as any significant challenges you’ve encountered with respect to the particular aspect of the work being described.

1. **Summarize briefly the specific “structural” changes (e.g., changes in course content, number of courses offered, placement approaches, etc.) you implemented in your developmental math program (or in specific courses) as part of your college’s involvement in the Re-Thinking Precollege Math project.**

While we have made some structural changes over the past three years in our pre-college math courses, these were done outside the purview of our RPM grant from 2011-2012. This year we did, however, design and implement a new placement process using transcript analysis for students transitioning from the Northshore School District to Cascadia. This process started in May of 2012 and we are looking forward to evaluating its impact in 2012-2013.

1. **Reflect on the role that your institutional and departmental context (e.g., leadership issues, department-wide policies and decision-making, use of and support for part-time faculty, where the precollege math program is housed, whether the college administration is visibly and effectively supportive of innovations in pre-college programs, etc.) played in shaping the work you did in RPM and influencing the progress you’ve made in your project. In what ways have you specifically taken these contextual factors into consideration in addressing your work in the RPM project?**

Cascadia is lucky that we rarely have contextual factors that negatively influence innovative and student-centered change in our programs. As other faculty members from various institutions complain about getting buy-in from other faculty or support from administrators, we find ourselves unable to add much to that conversation. We do have the common issue of engaging part-time faculty, and have found that some have willingly joined in the collaborative work while others remain on the sidelines. We have found that personal invitations to part-time faculty members to participate, and providing stipends for their time, seems to influence them to join in the conversation and learning.

1. **The RPM project as a whole made an effort to promote and support faculty efforts to a) explore different concrete classroom practices and strategies around teaching and assessment and b) inquire collectively about the results of those efforts. To what extent and in what ways have any changes in instructional practices and collaborative inquiry occurred in the precollege math program at your college as part of your RPM project?**

During 2011-2012 (the year in which we received RPM funding), our team focused on changing our teaching practices significantly by redefining how we developed, structured, and facilitated group work in the classroom. Five instructors of pre-college math (along with four local high school instructors) took a five-day workshop on Designing Effective Group-work in Math Classrooms through the University of Washington. We developed group-worthy tasks in this class, and then continued this work by meeting weekly during the 2011-2012 school year to plan and debrief our lessons. We have also shared our work with a broader audience of instructors both internally (via WAMAP) and externally (via the RPM Task Library).

All five of the Cascadia math instructors feel as if their teaching has changed significantly this year. While we all did group work before in our classes (as Cascadia instructors are strongly encouraged to do), our tasks for students and facilitation in the classroom is now dramatically different. All of us have removed scaffolding from group tasks and attempted to create experiences that are authentic, use multiple abilities, and necessitate students to work in groups. In addition, each of us has made changes in how we facilitate the group process including exploring ideas for assigning groups, answering questions, moving around the room, providing resources, and assessment.

While the focus on a particular part of our pedagogy has influenced our classrooms and student learning, we feel strongly that the collaborative inquiry process in doing this work has been particularly impactful to faculty. The process of participating in shared professional development, and then meeting weekly (sometimes with the high school teachers), has allowed us to build a common language around teaching and what we believe learning mathematics means. We have developed trust and respect, as well as genuine affection for one another as colleagues. We have multiple communication methods (weekly meetings, WAMAP forums, and email threads) where we discuss everything from a particular task we did in class to assessment practices to frustrations around student attributes. For us, this collaborative process is the most important part of our work that we hope to maintain and expand in the coming years.

1. **How, if at all, have any of the activities you’ve done in your precollege math program as part of the RPM project incorporated a focus on student attributes and perspectives as math learners?**

We have not specifically focused on student attributes and perspectives in our work, but have had many conversations around the notion of productive struggle. Our focus on group-worthy tasks that engage students and require collaboration is about providing experiences where students are forced to demonstrate persistence. We informally discuss this attribute in our classrooms as part of our process.

**Section 2: Sustainability and Next Steps**

1. **What aspects of the changes in your precollege math program initiated and/or support by the work of the RPM project do you foresee being sustained at your college beyond December 2012 without the infusion of any new external grant support?**

We have begun a cultural shift towards teaching pre-college math classes collaboratively instead of in isolation. We plan to continue and expand this approach, and have support from our institution to do this work while maintaining a focus on designing effective group-work.

1. **If new grant resources (comparable to the RPM level of funding at a minimum) were available, what specific activities would you want to extend or initiate to continue your efforts to address improving student progress and success in your precollege math program?**

We are most interested in sustaining our collaborative work, but finding money for stipends to pay part-time faculty to be part of this process is our biggest challenge. There is a small internal budget for this currently, but it is not substantial enough to include all our part-time instructors at this time. We would first use funding to support these types of activities, as well as shared professional development from outside resources.

We have established a robust relationship with our local school district and hope to sustain it in the future in order to address high school to college transition issues. We are excited to use the Common Core Standards as a lens for improving both Northshore and Cascadia math classrooms in the coming year, and are hoping for some support in that process.